

NON-PUBLIC?: N  
ACCESSION #: 8911220055  
LICENSEE EVENT REPORT (LER)

FACILITY NAME: Joseph M. Farley - Unit 2 PAGE: 1 OF 03

DOCKET NUMBER: 05000364

TITLE: Personnel Error Causes Reactor Trip On Lo-Lo Steam Generator  
Level

EVENT DATE: 10/19/89 LER #: 89-013-00 REPORT DATE: 11/14/89

OTHER FACILITIES INVOLVED: DOCKET NO: 05000

OPERATING MODE: 2 POWER LEVEL: 002

THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR  
SECTION:

50.73(a)(2)(iv)

LICENSEE CONTACT FOR THIS LER:

NAME: D.N. Morey, General Manager - TELEPHONE: (205)899-5156  
Nuclear Plant

COMPONENT FAILURE DESCRIPTION:

CAUSE: SYSTEM: COMPONENT: MANUFACTURER:

REPORTABLE NPRDS:

SUPPLEMENTAL REPORT EXPECTED: No

ABSTRACT:

At 1823 on 10-19-89, with the unit operating at approximately two percent power, the reactor tripped due to lo-lo level in the 2C steam generator. The Unit Operator improperly transferred from auxiliary feedwater (AFW) to main feedwater (MFW) during a plant startup.

This event was caused by personnel error in that the Unit Operator incorrectly transferred steam generator level control from AFW to MFW. A contributing cause was that the personnel involved failed to properly restore air to the 2C MFW bypass valve.

The personnel involved have been counseled concerning improper feedwater transfer and restoration of air to feedwater valves. A training change notice describing this event will be issued to all licensed personnel.

END OF ABSTRACT

TEXT PAGE 2 OF 3

#### Plant and System Identification

Westinghouse - Pressurized Water Reactor

Energy Industry Identification System codes are identified in the text as XX!.

#### Summary of Event

At 1823 on 10-19-89, with the unit operating at approximately two percent power, the reactor AB! tripped due to lo-lo level in the 2C steam generator. The Unit Operator improperly transferred from auxiliary feedwater (AFW) BA! to main feedwater (MFW) SJ! during a plant startup.

#### Description of Event

On 10-19-89, the unit was being started up following a reactor trip. At approximately 1817, the unit was operating at approximately two percent power and feedwater was being supplied by the AFW pumps. At this time, the Unit Operator began transferring the source of feedwater to the steam generators from the AFW pumps to a main steam generator feedwater pump. The procedure for this transfer involves verifying that the steam generator level increases by automatic action of the bypass valve prior to decreasing AFW flow.

The Unit Operator did not verify that steam generator level was increasing prior to decreasing the AFW flow. As the Unit Operator decreased the AFW flow to the 2C steam generator, he saw the position demand for the 2C MFW bypass valve increasing and assumed that steam generator level would start increasing. However, the steam generator level continued to decrease. The Unit Operator then increased demand on the 2C steam generator bypass valve. Since level was still decreasing, the operators decreased reactor power and increased AFW flow in an attempt to restore the steam generator level. However, these actions failed to restore steam generator level prior to the 2C steam generator level decreasing to the lo-lo level setpoint. A reactor trip occurred at 1823 on 10-19-89. Subsequently, it was found that the 2C steam generator bypass valve failed to open since air had been erroneously isolated to the valve.

Following the trip, the operators implemented FNP-2-EEP-0 (Reactor Trip or Safety Injection) and FNP-2-ESP-0.1 (Reactor Trip Response), ensuring that the unit was safely in Mode 3. The unit was maintained in a stable

condition.

#### Cause of Event

This event was caused by cognitive personnel error in that the Unit Operator failed to properly transfer from auxiliary feedwater to main feedwater. A contributing cause was that the personnel involved failed to properly restore air to the 2C MFW bypass valve.

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#### Reportability Analysis and Safety Assessment

This event is reportable because of the actuation of the reactor protection system. After the trip, the following safety systems operated as designed: main feedwater was isolated as required, the auxiliary feedwater pumps (which were already running) provided flow to the steam generators, source range nuclear instrumentation automatically energized, and pressurizer heaters and spray valves operated automatically as required to maintain system pressure. There was no effect on the health and safety of the public.

#### Corrective Action

The personnel involved have been counseled concerning improper feedwater transfer and restoration of air to feedwater valves. A training change notice describing this event will be issued to all licensed personnel.

#### Additional Information

The unit returned to power operation on 10-20-89 at 0659.

The following LER's reported reactor trips caused by operators failing to maintain proper steam generator water level: LER 87-009-00, LER 84-001-00 (both Unit 2).

No components failed during this event.

This event would not have been more severe if it had occurred under different operating conditions.

ATTACHMENT 1 TO 8911220055 PAGE 1 OF 1

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W.G. Hairston, III  
Senior Vice President  
Nuclear Operations

November 14, 1989

Alabama Power

the southern electric system

10 CFR 50.73

Docket No. 50-364

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Dear Sir:

Joseph M. Farley Nuclear Plant - Unit 2  
Licensee Event Report No. LER 89-013-00

Joseph M. Farley Nuclear Plant, Unit 2, Licensee Event Report No. LER  
89-013-00 is being submitted in accordance with 10CFR50.73.

If you have any questions, please advise.

Respectfully submitted,

W.G. Hairston, III

WGH,III/JAR:md 8.49

Enclosure

cc: Mr. S.D. Ebnetter  
Mr. G.F. Maxwell

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